Anne M Villeneuve

List of Publications by Year
in descending order

55 papers	6,273 citations	136950 32 h-index	175258 52 g-index
85 all docs	85 docs citations	85 times ranked	2816 citing authors

#	Article	IF	Citations
1	Meiotic Recombination in C. elegans Initiates by a Conserved Mechanism and Is Dispensable for Homologous Chromosome Synapsis. Cell, 1998, 94, 387-398.	28.9	747
2	Synaptonemal Complex Assembly in C. elegans Is Dispensable for Loading Strand-Exchange Proteins but Critical for Proper Completion of Recombination. Developmental Cell, 2003, 5, 463-474.	7.0	393
3	Synapsis-dependent and -independent mechanisms stabilize homolog pairing during meiotic prophase in C. elegans. Genes and Development, 2002, 16, 2428-2442.	5.9	359
4	Chromosome Sites Play Dual Roles to Establish Homologous Synapsis during Meiosis in C. elegans. Cell, 2005, 123, 1037-1050.	28.9	290
5	X-chromosome silencing in the germline ofC. elegans. Development (Cambridge), 2002, 129, 479-492.	2.5	280
6	Whence Meiosis?. Cell, 2001, 106, 647-650.	28.9	238
7	COSA-1 Reveals Robust Homeostasis and Separable Licensing and Reinforcement Steps Governing Meiotic Crossovers. Cell, 2012, 149, 75-87.	28.9	231
8	Caenorhabditis elegans msh-5 Is Required for Both Normal and Radiation-Induced Meiotic Crossing Over but Not for Completion of Meiosis. Genetics, 2000, 156, 617-630.	2.9	228
9	Crossing Over During Caenorhabditis elegans Meiosis Requires a Conserved MutS-Based Pathway That Is Partially Dispensable in Budding Yeast. Genetics, 1999, 153, 1271-1283.	2.9	216
10	Differential timing of S phases, X chromosome replication, and meiotic prophase in the C. elegans germ line. Developmental Biology, 2007, 308, 206-221.	2.0	196
11	HTP-1-dependent constraints coordinate homolog pairing and synapsis and promote chiasma formation during C. elegans meiosis. Genes and Development, 2005, 19, 2727-2743.	5.9	186
12	X-chromosome silencing in the germline of C. elegans. Development (Cambridge), 2002, 129, 479-92.	2.5	181
13	Chromosome-Wide Control of Meiotic Crossing over in C. elegans. Current Biology, 2003, 13, 1641-1647.	3.9	170
14	Meiotic chromosome structures constrain and respond to designation of crossover sites. Nature, 2013, 502, 703-706.	27.8	154
15	C. elegans HIM-17 Links Chromatin Modification and Competence for Initiation of Meiotic Recombination. Cell, 2004, 118, 439-452.	28.9	142
16	Crossovers trigger a remodeling of meiotic chromosome axis composition that is linked to two-step loss of sister chromatid cohesion. Genes and Development, 2008, 22, 2886-2901.	5.9	141
17	Lateral microtubule bundles promote chromosome alignment during acentrosomal oocyte meiosis. Nature Cell Biology, 2009, 11, 839-844.	10.3	141
18	The C. elegans DSB-2 Protein Reveals a Regulatory Network that Controls Competence for Meiotic DSB Formation and Promotes Crossover Assurance. PLoS Genetics, 2013, 9, e1003674.	3.5	134

#	Article	IF	Citations
19	Robust Crossover Assurance and Regulated Interhomolog Access Maintain Meiotic Crossover Number. Science, 2011, 334, 1286-1289.	12.6	118
20	Crossing over is coupled to late meiotic prophase bivalent differentiation through asymmetric disassembly of the SC. Journal of Cell Biology, 2005, 168, 683-689.	5.2	115
21	Identification of DSB-1, a Protein Required for Initiation of Meiotic Recombination in Caenorhabditis elegans, Illuminates a Crossover Assurance Checkpoint. PLoS Genetics, 2013, 9, e1003679.	3.5	113
22	C. elegans Germ Cells Switch between Distinct Modes of Double-Strand Break Repair During Meiotic Prophase Progression. PLoS Genetics, 2007, 3, e191.	3.5	112
23	Dynamic Architecture of DNA Repair Complexes and the Synaptonemal Complex at Sites of Meiotic Recombination. Cell, 2018, 173, 1678-1691.e16.	28.9	106
24	SYP-3 Restricts Synaptonemal Complex Assembly to Bridge Paired Chromosome Axes During Meiosis in Caenorhabditis elegans. Genetics, 2007, 176, 2015-2025.	2.9	105
25	Differential Localization and Independent Acquisition of the H3K9me2 and H3K9me3 Chromatin Modifications in the Caenorhabditis elegans Adult Germ Line. PLoS Genetics, 2010, 6, e1000830.	3.5	101
26	Meiotic recombination modulates the structure and dynamics of the synaptonemal complex during C. elegans meiosis. PLoS Genetics, 2017, 13, e1006670.	3.5	97
27	Chromosome-Wide Regulation of Meiotic Crossover Formation in Caenorhabditis elegans Requires Properly Assembled Chromosome Axes. Genetics, 2004, 168, 1275-1292.	2.9	86
28	Synapsis-Defective Mutants Reveal a Correlation Between Chromosome Conformation and the Mode of Double-Strand Break Repair During Caenorhabditis elegans Meiosis. Genetics, 2007, 176, 2027-2033.	2.9	80
29	Mammalian CNTD1 is critical for meiotic crossover maturation and deselection of excess precrossover sites. Journal of Cell Biology, 2014, 205, 633-641.	5.2	80
30	The Synaptonemal Complex Shapes the Crossover Landscape Through Cooperative Assembly, Crossover Promotion and Crossover Inhibition During Caenorhabditis elegans Meiosis. Genetics, 2010, 186, 45-58.	2.9	74
31	Full-Length Synaptonemal Complex Grows Continuously during Meiotic Prophase in Budding Yeast. PLoS Genetics, 2012, 8, e1002993.	3.5	69
32	An Asymmetric Chromosome Pair Undergoes Synaptic Adjustment and Crossover Redistribution During Caenorhabditis elegans Meiosis: Implications for Sex Chromosome Evolution. Genetics, 2011, 187, 685-699.	2.9	45
33	Assembly ofCaenorhabditis elegansacentrosomal spindles occurs without evident microtubule-organizing centers and requires microtubule sorting by KLP-18/kinesin-12 and MESP-1. Molecular Biology of the Cell, 2016, 27, 3122-3131.	2.1	43
34	HAL-2 Promotes Homologous Pairing during Caenorhabditis elegans Meiosis by Antagonizing Inhibitory Effects of Synaptonemal Complex Precursors. PLoS Genetics, 2012, 8, e1002880.	3.5	40
35	Assembly of the Synaptonemal Complex Is a Highly Temperature-Sensitive Process That Is Supported by PGL-1 During Caenorhabditis elegans Meiosis. G3: Genes, Genomes, Genetics, 2013, 3, 585-595.	1.8	40
36	Quantitative cytogenetics reveals molecular stoichiometry and longitudinal organization of meiotic chromosome axes and loops. PLoS Biology, 2020, 18, e3000817.	5.6	36

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37	Chromosome Painting Reveals Asynaptic Full Alignment of Homologs and HIM-8â€“Dependent Remodeling of X Chromosome Territories during Caenorhabditis elegans Meiosis. PLoS Genetics, 2011, 7, e1002231.	3.5	34
38	Chromosome Movements Promoted by the Mitochondrial Protein SPD-3 Are Required for Homology Search during Caenorhabditis elegans Meiosis. PLoS Genetics, 2013, 9, e1003497.	3.5	33
39	DNA Helicase HIM-6/BLM Both Promotes MutSÎ³-Dependent Crossovers and Antagonizes MutSÎ³-Independent Interhomolog Associations During Caenorhabditis elegans Meiosis. Genetics, 2014, 198, 193-207.	2.9	33
40	Separable Roles for a Caenorhabditis elegans RMI1 Homolog in Promoting and Antagonizing Meiotic Crossovers Ensure Faithful Chromosome Inheritance. PLoS Biology, 2016, 14, e1002412.	5.6	32
41	A Role for Caenorhabditis elegans Chromatin-Associated Protein HIM-17 in the Proliferation vs. Meiotic Entry Decision. Genetics, 2007, 175, 2029-2037.	2.9	31
42	Interdependent and separable functions of Caenorhabditis elegans MRN-C complex members couple formation and repair of meiotic DSBs. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E4443-E4452.	7.1	31
43	Caenorhabditis elegans DSB-3 reveals conservation and divergence among protein complexes promoting meiotic double-strand breaks. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	23
44	Time-Course Analysis of Early Meiotic Prophase Events Informs Mechanisms of Homolog Pairing and Synapsis in Caenorhabditis elegans. Genetics, 2017, 207, 103-114.	2.9	20
45	A streamlined tethered chromosome conformation capture protocol. BMC Genomics, 2016, 17, 274.	2.8	17
46	Manipulation of Karyotype inCaenorhabditis elegansReveals Multiple Inputs Driving Pairwise Chromosome Synapsis During Meiosis. Genetics, 2015, 201, 1363-1379.	2.9	15
47	Robust designation of meiotic crossover sites by CDK-2 through phosphorylation of the MutSÎ³ complex. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2117865119.	7.1	14
48	Spatial Regulation of Polo-Like Kinase Activity During Caenorhabditis elegans Meiosis by the Nucleoplasmic HAL-2/HAL-3 Complex. Genetics, 2019, 213, 79-96.	2.9	12
49	Evidence That Masking of Synapsis Imperfections Counterbalances Quality Control to Promote Efficient Meiosis. PLoS Genetics, 2013, 9, e1003963.	3.5	11
50	DEVELOPMENT: How to Stimulate Your Partner. Science, 2001, 291, 2099-2101.	12.6	5
51	Ensuring an Exit Strategy: RTEL1 Restricts Rogue Recombination. Cell, 2008, 135, 213-215.	28.9	2
52	Suppression of by a transgene insertion expressing GFP::COSA-1. MicroPublication Biology, 2021, 2021, .	0.1	1
53	C. elegans germ cells switch between distinct modes of double-strand break repair during meiotic prophase progression. PLoS Genetics, 2005, preprint, e191.	3.5	0
54	me101 is a new allele of rad-51. MicroPublication Biology, 2019, 2019, .	0.1	0

#	Article	IF	Citations
55	me98 is a new allele of rad-54. MicroPublication Biology, 2019, 2019, .	0.1	0